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EXAMINER
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RABAGO, ROBERTO

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* LIN WANG, MARIA SPINU, and JOEL DAVID CITRON

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Appeal 2009-000308  
Application 10/659,169  
Technology Center 1700

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Decided:<sup>1</sup> June 30, 2009

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Before BEVERLY A. FRANKLIN, LINDA M. GAUDETTE, and  
KAREN M. HASTINGS, *Administrative Patent Judges*.

GAUDETTE, *Administrative Patent Judge*.

DECISION ON APPEAL

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the Decided Date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's decision finally rejecting claims 26-28, 30-33, and 35-39 (Final Office Action, mailed Aug. 25, 2006), the only claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

#### STATEMENT OF THE CASE

Claim 26, the sole independent claim, is illustrative of the subject matter on appeal, and is reproduced from the Claims Appendix to the Appeal Brief ("Br."), filed Jul. 30, 2007:

26. A process for producing a blend of two or more polyethylenes, comprising the step of contacting:

(1) ethylene;

(2) one or more separately added  $\alpha$ -olefins of the formula  $R^{18}CH=CH_2$ , wherein  $R^{18}$  is alkyl, wherein  $R^{18}$  has an even number of carbon atoms;

(3) a first active polymerization catalyst under conditions to copolymerize ethylene and the separately added  $\alpha$ -olefins; and

(4) a second active polymerization catalyst under conditions to polymerize ethylene, but has little or no tendency to copolymerize ethylene and  $\alpha$ -olefins,

and provided that said first and said second active polymerization catalysts are selected from the group consisting of Ziegler-Natta catalysts and metallocenes,

and further provided that when said first active polymerization catalyst and said second active polymerization catalyst are both metallocenes, said one or more separately added olefins is a series of olefins of the formula  $R^{18}CH=CH_2$ .

Appellants request review of the sole ground of rejection (Br. 5): claims 26-28, 30-33, and 35-39 under 35 U.S.C. § 103(a) as unpatentable over EP 0,128,046 (“EP 046”), published Dec. 12, 1984 (Examiner’s Answer (“Ans.”), mailed Nov. 19, 2007, 3).

### ISSUE

Have Appellants shown reversible error in the Examiner’s finding that EP 046 suggests the use of two or more  $\alpha$ -olefins as required by claim 26?

We answer this question in the negative.

### FINDINGS OF FACT

EP 046 “is directed towards a catalytic process for the polymerization of ethylene and *one or more alpha-olefins* to polyethylene-copolyethylene-alpha-olefin reactor blends” (p. 4, ll. 27-30 (emphasis added)). “In particular, the polymer blends . . . are blends of polyethylenes . . . with copolyethylene higher *alpha-olefins* having from 3 to about 10 carbon atoms and *preferably 4 to 8 carbon atoms*” (p. 4, l. 32-p. 5, l. 1 (emphasis added)). “Illustrative of the higher alpha-olefins are propylene, butene-1, hexane-1 and octane-1” (p. 5, ll. 1-2). “In the process . . ., ethylene, together with the *alpha-olefins*, is polymerized in the presence of a homogeneous catalyst system comprising at least two different metallocenes and an alumoxane” (p. 5, ll. 4-7 (emphasis added)).

### PRINCIPLES OF LAW

In considering the question of the obviousness of a claimed invention in view of the prior art relied upon, we are guided by the basic principle that the question under 35 U.S.C. § 103 is not merely what the references expressly teach but what they would have suggested to one of ordinary skill

in the art at the time of the invention. *See Merck & Co., Inc. v. Biocraft Labs., Inc.*, 874 F.2d 804, 807-08 (Fed. Cir. 1989); *In re Keller*, 642 F.2d 413, 425 (CCPA 1981) (“The test for obviousness is not . . . that the claimed invention must be expressly suggested in any one or all of the references.”).

An obviousness rejection predicated on selection of one or more components from numerous possible choices may be appropriate if the prior art provides direction as to which of many possible choices is likely to be successful. *See PharmaStem Therapeutics, Inc. v. ViaCell, Inc.*, 491 F.3d 1342, 1364 (Fed Cir. 2007); *In re Arkley*, 455 F.2d 586, 587-88 (CCPA 1972) (noting that “picking and choosing may be entirely proper in the making of a 103, obviousness rejection, where the applicant must be afforded an opportunity to rebut with objective evidence any inference of obviousness which may arise from the similarity of the subject matter which he claims to the prior art”); *cf. KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007) (explaining that it is erroneous to conclude “that a patent claim cannot be proved obvious merely by showing that the combination of elements was ‘obvious to try’”); *In re O’Farrell*, 853 F.2d 894, 903-04 (Fed. Cir. 1988) (“For obviousness under § 103, all that is required is a reasonable expectation of success.” (citations omitted)).

#### ANALYSIS

Appellants’ sole argument on appeal is that the Examiner erred in finding that EP 046 suggests the use of two or more  $\alpha$ -olefins as required by claim 26<sup>2</sup>. (*See Br. 5.*) According to Appellants, EP 046 is “ambiguous in

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<sup>2</sup> We note that where two metallocene catalysts are used, as in the EP 046 process, the conditional limitation in the final clause of claim 26 is met,

suggesting whether or not two or more  $\alpha$ -olefins are used.” (Br. 6.) Appellants do not disagree that EP 046 could be interpreted as disclosing the use of more than one  $\alpha$ -olefin. (*See, e.g.*, Br. 6 (“points (d) and (j) unambiguously support the use of more than one  $\alpha$ -olefin”); *infra* quotations from Br. 7.) Rather, Appellants contend that the ordinary artisan would be more likely to interpret the reference as limited to one  $\alpha$ -olefin. (*See, e.g.*, Br. 7 (“Although in theory more than one  $\alpha$ -olefin could be used to make an LLDPE, one skilled in the art would immediately think of LLDPE that contains only one  $\alpha$ -olefin, since these are by far more common than those that could contain more than one  $\alpha$ -olefin.”).)

We are not persuaded of reversible error on the part of the Examiner. As admitted by Appellants, EP 046 is reasonably interpreted as suggesting the use of more than one  $\alpha$ -olefin. (*See supra* quotations from Br. 6, 7.) Further, as pointed out by the Examiner, EP 046 identifies a group of four preferred  $\alpha$ -olefins (Ans. 3) such that “the odds of selecting applicants’ claimed combination from the list of specifically named monomers is one in two” (Ans. 5). Appellants have not addressed this finding. (*See generally*, Br.)

Where the Examiner establishes a reasonable basis to conclude that the claimed invention is obvious, the burden shifts to the Appellants to rebut the *prima facie* case by providing evidence of unexpected results or a showing that the prior art teaches away from the claimed invention in any material respect. *See In re Geisler*, 116 F.3d 1465, 1469-70 (Fed. Cir.

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thereby invoking the additional requirement that the “one or more separately added olefins is a series.”

Appeal 2009-000308  
Application 10/659,169

1997). Appellants' Brief contains nothing more than attorney argument, which is insufficient to meet this burden. *Id.* at 1471.

### CONCLUSION

Appellants have not identified reversible error in the Examiner's obviousness determination. The decision of the Examiner rejecting claims 26-28, 30-33, and 35-39 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(v).

AFFIRMED

PL Initial:  
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